Message

From: Whalan, John [Whalan.John@epa.gov]

Sent: 11/4/2013 6:04:19 PM

To: Kraft, Andrew [Kraft.Andrew@epa.gov]; Vulimiri, Suryanarayana [Vulimiri.Sury@epa.gov]
CC: Glenn, Barbara [Glenn.Barbara@epa.gov]; Subramaniam, Ravi [Subramaniam.Ravi@epa.gov]

Subject: RE: has this reference been incorporated into the exhaled breath discussion?

Andrew,

The thoughts I just sent you are what I shared with Sury back in July.

Ex. 5 Deliberative Process (DP)

John

From: Kraft, Andrew

Sent: Monday, November 04, 2013 12:47 PM **To:** Whalan, John; Vulimiri, Suryanarayana **Cc:** Glenn, Barbara; Subramaniam, Ravi

Subject: RE: has this reference been incorporated into the exhaled breath discussion?

Okay, thanks John. They did notice that when subjects breathed formaldehyde-free air, they still exhaled formaldehyde (through the nose only) at ~8ppbv... is there any explanation why the nose-exhaled levels are consistently so much higher than the mouth-exhaled levels (unlike any of the other tested compounds)? I think they attribute it to increased absorption in nasal tissues, and gradual release from the nasal tissue over some time following exposure.

Was Ravi brought into this discussion? I have cc'd him here as an FYI.

From: Whalan, John

Sent: Monday, November 04, 2013 12:39 PM **To:** Kraft, Andrew; Vulimiri, Suryanarayana

Cc: Glenn, Barbara

Subject: RE: has this reference been incorporated into the exhaled breath discussion?

Andrew,

Sury found this article in July and shared it with me. After reviewing it in depth, this is what I wrote to Sury:

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

John

From: Kraft, Andrew

Sent: Monday, November 04, 2013 12:24 PM **To:** Vulimiri, Suryanarayana; Whalan, John

Cc: Glenn, Barbara; Kraft, Andrew

Subject: has this reference been incorporated into the exhaled breath discussion?

... seems to indicate inhaled formaldehyde is not exhaled (to any appreciable extent). If this is the case, we may want to adjust our discussion a bit.